

ABSTRACT OF THE DISCLOSURE

A superabrasive wire saw having a plurality of individual coated superabrasive particles attached to a wire with an organic binder is disclosed and described. The superabrasive particle can be coated with a solidified coating of a molten braze alloy that
5 is chemically bonded to the superabrasive particle. The organic binder can optionally contain filler materials and/or an organometallic coupling agent to improve the retention of coated superabrasive particles. The resulting superabrasive wire saws can be produced having diameters of less than 0.5 mm which significantly reduce kerf loss. Various methods for making and using such a superabrasive wire saw are additionally disclosed
10 and described.